Year 10 Learning Map

- NUMBER
- ALGEBRA
- RATIO & PROPORTION
- STATISTISTICS/PROBABILITY
- GEOMETRY & MEASURE

Y11

Using Number

- Laws of indices (zero power, negative indices and power of powers
- Factors, multiples and primes
- Upper and lower bounds
- Standard Form
- Sequences (linear and quadratic)
- Surds
- Rational and irrational numbers

Delving into Data

- Histograms
- Cumulative frequency diagrams
- Compare distributions
- Construct and interpret charts and graphs
- Averages and spread
- Box plots
- Line of best fit and extrapolation

SUMMER

Proportions and Proportional Change

- Frequency trees and tree diagrams (independent events)
- Simple and Compound interest
- Best buy problems
- Conditional probability
- Percentage change
- Ratio in area and volume problems
- Share in a ratio

Geometry

- Bearings
- Length of an arc, area of a sector
- Volume and surface area of sphere, cone and cylinder
- Scale diagrams
- Recognise and label parts of a circle
- Circle theorems
- Vectors

SPRING

Developing Algebra

- Solve simultaneous equations by elimination
- Solve simultaneous equations by substitution
- Inequalities on a graph
- Inequalities on a number line
- Solve simultaneous equations; one quadratic one linear
- Quadratic equations and inequalities
- Form and solve equations and inequalities
- Solve simultaneous equations graphically

Y9 RWP R

Reasoning with proportion

Representations

Y10 AUTUMN

Similarity

- Prove triangles are congruent
- Use sine and cosine rules
- Use trigonometric ratios
- Identify similar shapes
- Enlarge a shape by a scale factor
- Explore areas and volumes of similar shapes
- Pythagoras' Theorem